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Richards et al.

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(54) **WIRELESS INTERACTION WITH MEMORY ASSOCIATED WITH A REPLACEABLE MODULE FOR OFFICE EQUIPMENT**

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1 day.

This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.⁷** **G03G 21/16; G03G 15/00**

(52) **U.S. Cl.** **399/111; 12/25**

(58) **Field of Search** **399/8, 12, 24,**
399/25, 27, 109, 110, 111, 116, 119, 122,
262; 347/19, 86, 108, 152

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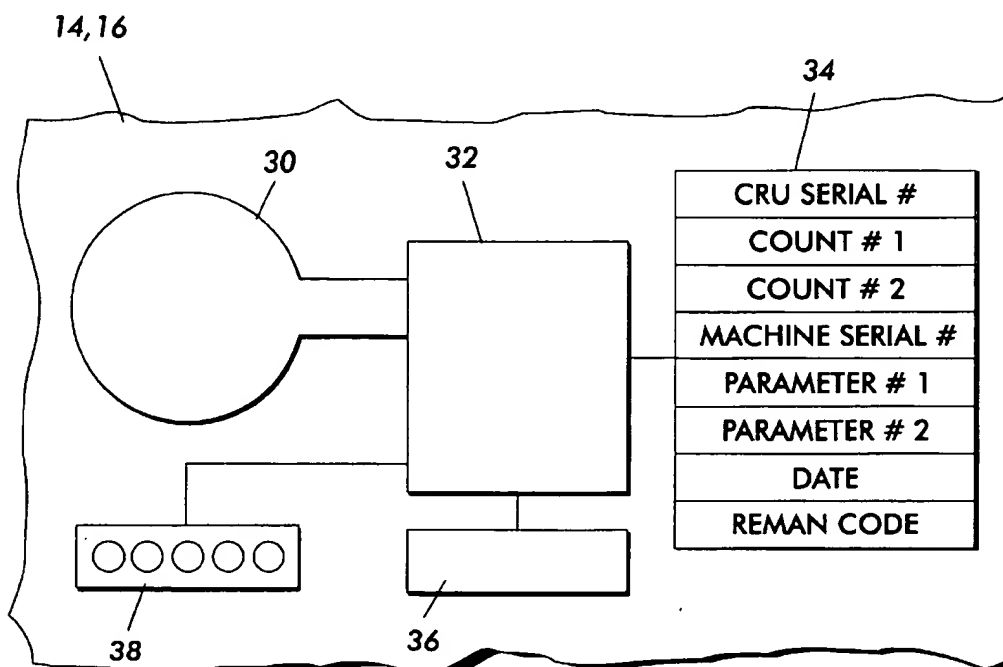
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(57) **ABSTRACT**

In a printer or copier, a removable module, such as a marking material supply module or a marking device module, is provided with a non-volatile memory chip which retains information about the cumulative use of the module and other performance-related data. The non-volatile memory is accessed through a wireless interface, such as an RF loop or IR detector, which is also associated with the module. The memory can be accessed, through wireless means, either by the printer or copier itself or by an external device, and also while the memory is not installed in a printer or copier.

9 Claims, 4 Drawing Sheets



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TITLE: Wireless interaction with memory associated with a
replaceable module for office equipment

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Detailed Description Text - DETX (3):

It will be seen in FIG. 1 that the various modules such as 14 or 16, as well as control board 12, which generally oversees the operation of the entire printer 10, communicate among each other for purposes of outputting prints. The lines of communication among various modules is shown simply as a double-headed arrows, and will be described in detail below. Control board 12 may further include a connection to a user interface 20 through which certain messages regarding the function of the printer 10 are communicated to the user.

Control module 12 may also communicate with users through a network connection 22, such as over phone lines or the Internet.

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